Picture Tube

SHORT RECTANGULAR GLASS TYPE  ALUMINIZED SCREEN
LOW-VOLTAGE ELECTROSTATIC FOCUS  114° MAGNETIC DEFLECTION
With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:
Direct Interelectrode Capacitances:
  Cathode to all other electrodes .... 5 pf
  Grid No.1 to all other electrodes .... 6 pf
  External conductive coating to anode. (2500 max. 1700 min. pf
Heater Current at 6.3 volts .... 600 ± 60 ma
Heater Warm-Up Time (Average) .... 11 seconds
Electron Gun. .... Type Requiring No Ion-Trap Magnet

Optical:
Phosphor (For curves, see front of this Section). P4—Sulfide Type,
  Aluminized
Faceplate .... Filterglass
  Light transmission (Approx.) .... 78%

Mechanical:
Weight (Approx.) .... 24 lbs
Overall Length .... 13-11/16" + 5/16" - 1/4" Neck Length .... 4-3/8" ± 1/8"
Projected Area of Screen .... 282 sq. in.

External Conductive Coating:
  Type ..... Regular-Band
  Contact area for grounding .... Near Reference Line

For Additional Information on Coatings and Dimensions:
  See Picture-Tube Dimensional-Outlines and Bulb J187 B sheets at
  front of this section
Cap .... Recessed Small Cavity (JEDEC No.J1-21)
Base .... Small-Button Neoeightar 7-Pin, Arrangement 1,
  (JEDEC No.B7-208)

Basing Designation for BOTTOM VIEW .... 8HR

Pin 1—Heater
Pin 2—Grid No.1
Pin 3—Grid No.2
Pin 4—Grid No.4
Pin 6—Grid No.1
Pin 7—Cathode
Pin 8—Heater

Cap—Anode
  (Grid No.3, Grid No.5,
  Screen, Collector)
  C—External
  Conductive Coating

RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.
Maximum and Minimum Ratings, Design-Maximum Values:

Unless otherwise specified, voltage values are positive with respect to cathode

ANODE VOLTAGE ... 23500 max. volts
                11000 min. volts

GRID-No.4 (FOCUSING) VOLTAGE:
  Positive value ... 1100 max. volts
  Negative value ... 550 max. volts

GRID-No.2 VOLTAGE ...
  550 max. volts
  200 min. volts

GRID-No.1 VOLTAGE:
  Negative peak value ... 200 max. volts
  Negative bias value ... 154 max. volts
  Positive bias value ... 0 max. volts
  Positive peak value ... 2 max. volts

HEATER VOLTAGE ... 6.9 max. volts
                    5.7 min. volts

PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode:
    During equipment warm-up period not exceeding 15 seconds ... 450 max. volts
    After equipment warm-up period ... 200 max. volts

  Heater positive with respect to cathode:
    Combined AC and DC voltage ... 200 max. volts
    DC component ... 100 max. volts

Typical Operating Conditions for Grid-Drive Service:

Unless otherwise specified, voltage values are positive with respect to cathode

Anode Voltage ... 14000 volts
Grid-No.4 Voltage ... 0 to 400 volts
Grid-No.2 Voltage ... 450 volts
Grid-No.1 Voltage for visual extinction of focused raster ... -45 to -105 volts

Maximum Circuit Value:
  Grid-No.1-Circuit Resistance ... 1.5 max. megohms

For X-radiation shielding considerations, see sheet X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES at front of this Section